

186 Center Street Suite 290 Clinton, NJ 08809 (908) 735-9315 (908) 735-2132 FAX

October 15, 2013

**VIA ELECTRONIC & US MAIL** 

Ms. Stephanie Vaughn
ATTN: Lower Passaic River Remedial Project Manager
Emergency and Remedial Response Division
U.S. EPA, Region 2
290 Broadway, 19th Floor
New York, New York 10007

Re: Monthly Progress Report No. 77 – September 2013
Lower Passaic River Study Area (LPRSA) Remedial Investigation/ Feasibility
Study (RI/FS)
CERCLA Docket No. 02-2007-2009

Dear Ms. Vaughn:

de maximis, inc. is submitting this Monthly Progress Report for the above-captioned project on the behalf of the RI/FS Agreement Settling Parties (Cooperative Parties Group or CPG) pursuant to the Administrative Settlement Agreement and Order on Consent (Settlement Agreement or AOC). The Progress Report satisfies the reporting requirements of Paragraph 42 of said Settlement Agreement.

(a) Actions which have been taken to comply with this Settlement Agreement during the previous month.

#### **Meetings/Conference Calls**

 On September 26, EPA, CPG, and EPA and CPG contractors held an EPA-CPG Modeling meeting to discuss COPC surface mapping.

### Correspondence

- On September 2, EPA and CPG confirmed via email exchange the EPA-CPG Modeling meeting to be held on September 26, 2013.
- On September 4, CPG uploaded the draft Dissolved Oxygen Monitoring report to the EPA SharePoint site.
- On September 10, EPA provided CPG some modifications to the agenda for the September 26 EPA-CPG Modeling meeting and exchanged e-mails regarding the meeting topics.
- On September 10, CPG uploaded a redline/strikeout version of the Low Resolution Coring Supplemental Sampling Program 2 (SSP2) QAPP addendum to the EPA SharePoint site.



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- On September 12, CPG provided EPA the draft Carp Harvest Pilot Study QAPP Addendum.
- On September 16, CPG submitted the August Monthly Progress Report to EPA.
- On September 16, EPA provided the 2013 peer review report of the FFS Model
- On September 17, 18, and 19 EPA provided comments to CPG on the SSP2 QAPP Addendum.
- On September 20, CPG submitted requested modeling data and files to EPA for the September 26 EPA-CPG Modeling meeting.
- On September 20, CPG submitted a revised SSP2 QAPP Addendum to EPA.
- On September 20, EPA provided approval to CPG to start SSP2 field work with additional comments on the SSP2 QAPP.
- On September 23, CPG provided additional information including shapefiles and related data to EPA for the September 26 EPA-CPG Modeling meeting.
- On September 24, EPA and CPG exchanged emails regarding the use of a recently issued updated version of the ProUCL 5.0 software for use in the Risk Assessment work and the EPA provided a disk with the updated version to CPG.
- On September 27, EPA and CPG exchanged presentation materials from the September 26 EPA-CPG Modeling meeting.

#### Work

- CPG completed data validation on the High Volume (HV) Chemical Water Column Monitoring (CWCM) Event #2 data.
- CPG completed development of the QAPP Addendum for SSP2.
- CPG initiated field activities for SSP2.
- CPG initiated drafting a data report for the CWCM Program.
- CPG prepared a draft QAPP for a Carp Harvest Pilot Study.
- CPG continued development of the background and reference site example outline requested by EPA.
- CPG completed drafting a data report for the Dissolved Oxygen (DO) Monitoring Survey.
- CPG continued drafting a data report for the results of the upstream sediment chemistry testing associated with the Benthic Background Sediment Survey.
- CPG continued drafting a data report for the results of the upstream taxonomy enumeration associated with the Benthic Background Sediment Survey.
- CPG continued development of a preliminary Conceptual Site Model (CSM) deliverable.
- CPG continued early baseline risk assessment activities (update CSM, benthic and wildlife assessments).
- CPG Modeling Team continued work on the RCATOX Chemical Fate and Transport Model Code initial conditions and long-term calibration runs.

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- CPG Modeling Team continued work on the Bioaccumulation Model.
- CPG Modeling Team continued work on system understanding for hydrodynamic and sediment transport processes in Newark Bay.
- CPG continued review of sediment characteristics and potential target remedy locations in support of initial Feasibility Study (FS) evaluations.
- CPG began development of appendices and supporting documents for the FS.

## (b) Results of Sampling and Tests

• On September 17, CPG uploaded all validated data from the SV CWCM High Flow Event #2 and the HV CWCM Event #2 to the EPA SharePoint site.

# (c) Work planned for the next two months with schedules relating to the overall project schedule for RI/FS completion

- CPG will continue drafting the data report for the CWCM Program.
- · CPG will complete field activities in support of SSP2.
- CPG will initiate laboratory analysis of the samples from SSP2.
- CPG will complete drafting a data report for the results of the upstream sediment chemistry testing associated with the Benthic Background Sediment Survey.
- CPG will complete drafting a data report for the results of the upstream toxicity testing associated with the Benthic Background Sediment Survey.
- CPG will complete drafting a data report for the results of the upstream taxonomy enumeration associated with the Benthic Background Sediment Survey.
- CPG will continue drafting the Preliminary CSM Report.
- CPG will continue early baseline risk assessment activities (update CSM, benthic and wildlife assessments).
- CPG Modeling Team will continue calibration runs with the HQI ECOM-SEDZLJS and RCATOX codes and inputs.
- CPG Modeling Team will continue development of the Bioaccumulation Model.
- CPG Modeling Team will continue to support the CWCM program data evaluation.
- CPG will participate in LPR/Newark Bay Modeling Program progress calls and follow-up modeling collaboration meetings with EPA and EPA consultants.
- CPG will continue initial FS evaluation of targeted remedy locations.
- CPG will continue development of FS appendices and supporting documents.

# (d) <u>Problems encountered and anticipated problems, actual or anticipated delays, and solutions developed and implemented to address actual or anticipated problems or delays.</u>

 Based upon discussions with Region 2, the CPG understood that Region 2 considered the calibration of the HQI sediment transport and the chemical fate and Ms. S. Vaughn LPRSA RI/FS - Progress Report No. 77 – September 2013 October 15, 2013 Page 4 of 7

> transport model sufficient to support the revised FFS for the lower 8 miles of the LPRSA in the fall of 2012. Furthermore, the CPG understands that Region 2 received comments related to the FFS model both from the NRRB review conducted in December 2012 and the model peer review in February and March 2013. The CPG has requested that Region 2 provide the results of both the NRRB review and model peer review especially the comments that may be pertinent to the CPG's LPR/NB model development. EPA provided the 2013 peer review report on September 16 and notes that many of the issues with the sediment transport model, chemical fate transport and carbon model identified by the CPG in ongoing discussion including the CPG's November 2012 NRRB comments. understands that Region 2's Modeling Team in currently incorporating, calibrating and re-running the model based on the NRRB and peer review comments received by Region 2 through the spring of 2013. The CPG is continuing to work on both sediment transport model and the chemical fate and transport model for the LPRSA and incorporating the improvements and other changes that CPG has discussed with Region 2. Region 2 and CPG collaboration meetings were conducted throughout 2012 and in February 2013 and September 2013 this most recent and previous meetings are providing an opportunity for both modeling teams to understand differences between each team's approaches. In January, the CPG provided a detailed technical memorandum on its progress on the LPR/NB sediment transport modeling to Region 2; the current code and input and output files have also been provided, as discussed on February 28. EPA provided Newark Bay SedFlume data and FFS Model input files in March. Delays associated with both the sediment transport modeling and chemical fate and transport modeling schedules are extending the completion of the LPRSA RI/FS. As a result of the July 24 meeting with EPA HQ and Region 2, the CPG has developed and committed to completing a meeting schedule starting with September 26 meeting for the Region's review to address outstanding issues with the LPR/NB models related to, COPC mapping sediment transport, chemical fate and transport and bioaccumulation to occur during the third and fourth quarters of CY 2013.

• The CPG understands that Region 2 approved TMO's CSO/SWO Workplan in May 2011. It is also the CPG's understanding that the Method Detection Studies proposed by TMO and other work such as construction of the proposed mobile centrifuge/CSO sampling trailer required for Phase 1 work were completed in late August 2012. It is also the CPG's understanding that the EPA and TMO had agreed in late 2012 to delay the Phase I CSO sampling due to the failure of the PVSC treatment system and other regional POTWs. Furthermore, the CPG understands that delays to CSO Phase 1 sampling were caused by TMO inability to receive permission for the discharge of CSO effluent from its trailer back to the CSO from initially PVSC and then municipalities. Finally, TMO did not complete the Phase 1 CSO Sampling in May 2013 as outlined in the Region 2 approved schedule and as of September 21 Clay Street, TMO has yet to complete successful sampling that meets all of the Phase 1 requirements of the Region 2 approved QAPP.

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Additionally, the CPG understands that the municipal access issues are unresolved and will further delay completion of Phase 1. The extent to which the LPRSA RI/FS schedule may be impacted by the ongoing delays in the Phase 1 sampling schedule is significant. Moreover, there are likely to be significant delays of the Phase 2 CSO field schedule that will prevent a timely completion of the TMO CSO Study and adversely impact the timely completion of the LPRSA RI/FS. Specifically TMO's revised CSO Study schedule indicates that validated data from Phase 2 will be available in late 2015, one year after the anticipated Draft RI report submission in 2014 and FS submission in 2015.

TMO's CSO schedule and its inability to perform a study that meets the data quality objectives of the Region 2 approved QAPP are causing an unacceptable delay to the LPRSA RI/FS schedule as demonstrated by their inability to complete the Phase 1 work this spring and summer which now has extended into the fall of 2013. Furthermore, TMO is unable to conduct the work consistent with the EPA-approved QAPP as demonstrated during the June 10 and September 21, 2013 sampling events at Clay Street. Moreover the reliability and value of these data are questionable and the CPG does not believe that they can be relied upon to support the LPRSA RI/FS or the LPR/NB Model. The CPG has previously detailed these issues and other concerns regarding TMO's CSO Study in its July 5, 2013 letter to Region 2. Therefore, the CPG will be relying and employing alternative approaches for CSO/SWO data to be used in the LPR/NB Chemical Fate & Transport Model that consistent with the data EPA has relied for its FFS model to maintain a LPRSA RI/FS Study completion date of first quarter 2015.

Region 2 provided comments on July 11, 2011 which disapproved the revised risk assessment planning documents and required submission of revised documents within 30 days. Additionally, Region 2 provided a technical memo on July 25, 2011 on fish and crab consumption rates for the LPRSA Human Health Risk Assessment. The CPG filed a notice of dispute resolution in accordance with Section XV of the AOC on July 25, 2011 in response to Region's July 11, 2011 directive letter and July 25, 2011 technical memorandum. The revised RARC and TRV deliverables were submitted on August 9, 2011. On September 6, 2011 the CPG submitted a position paper in response to EPA's July 11, 2011 comments and July 25, 2011 technical memorandum. Dispute resolution meetings were held on December 1, 2011 and January 13, 2012. Region 2 provided the results of the dispute resolution to the CPG on February 7, 2012 and the CPG implemented the changes specified in the July 2011 directive comments and the results of the dispute resolution in the revised RARC which was submitted on April 13, 2012. Region 2 provided comments on the revised RARC on August 30, 2012; the CPG met with Region 2 on January 7, 2013 to discuss remaining background and reference issues and had a telephone call with EPA on January 28 to discuss cooking loss.

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Since early in 2013, Region 2 had promised to provide revised definitions for background and reference that the CPG can include in the revised RARC. These definitions were received by the CPG on June 28, It is the CPG's understanding that the issuance of the revised definitions was held-up by the NJDEP, NOAA and US FWS which did not accept definitions that are otherwise acceptable to the Region and the USACE, and which appear to be acceptable to the CPG based on the CPG's understanding of the revised definitions. The CPG has reviewed the June 28 definitions with the Region. Following CPG review and discussions and clarifications with the Region on August 8, the CPG is prepared to resubmit the revised final RARC, incorporating the June 28 definitions, in October to Region 2 for final approval.

The CPG was directed in 2009 by EPA to develop a single QAPP for surface water sampling for both the LPRSA and NBSA. At that time, the TMO parties were still members; the TMO parties left the CPG in May 2012. However, Occidental is the respondent to the NBSA AOC. The CPG followed the direction of the EPA and performed three separate programs, including developing QAPPs for the Physical Water Column Monitoring and Small Volume and High Volume Chemical Water Column Monitoring programs (in fact the High Volume program was implemented after TMO's departure). The CPG voiced its concerns to EPA that this involved both (1) different operable units of the Diamond Alkali NPL site and (2) different respondents to the respective AOCs - EPA did not address the CPG's concerns. In order to effectuate EPA's directive for synoptic sampling in the River and Newark Bay, the CPG agreed to allow Tierra, on behalf of Occidental, to use its contractor. However, subject to the terms of a letter agreement between the CPG and Tierra. the responsibility for the work in Newark Bay would be solely Tierra's. After authorizing and paying for Newark Bay work, Tierra stopped responding to the CPG's contractor task authorization requests starting in March 2013 and has not made any payments since mid-May. As a result of Tierra's failure to pay, the CPG's contractor was owed over \$1 MM in outstanding invoices and an estimated \$1.5 MM in labor and expenses associated with NBSA sampling (for a total of \$2.5 MM). In August, with EPA's approval, the CPG paid over \$1 MM in outstanding invoices from the LPRSA Trust. Until the remaining invoices are paid and the CPG is compensated for its payment, the CPG and its contractor will not provide any NBSA data to TMO and believes that EPA should take the same position. If EPA requires these data to be included in the LPR/NB Model as planned and the invoices are not paid then the schedules to complete the LPRSA RI/FS and the LPR/NB Model could be adversely impacted.

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If you have any questions, please contact me or Rob Law at (908) 735-9315.

Very truly yours,

de maximis, inc.

**Project Coordinator** 

cc: Pat Hick, EPA Office of Regional Counsel

William Hyatt, CPG Coordinating Counsel

Lisa Baron, USACE Tim Kubiak, USFWS Reyhan Mehran, NOAA Janine MacGregor, NJDEP

Elkins Green, NJDOT Sharon Budney, CDM Beth Franklin, USACOE Laura Kelmar, AECOM